IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Jacques Benkoski et al.

Assignee: Synopsys, Inc.

Title: METHOD FOR CREATING INCENTIVES FOR
                A CAD TOOL VENDOR

Serial No.:   09/780,882   File Date: February 9, 2001

Examiner: Jean D. Janvier   Art Unit: 3622

Docket No.:   SYN-0416

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

        This Appeal Brief is in support of the Notice of Appeal
dated August 28, 2007.

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I. REAL PARTY IN INTEREST

The real party in interest is the assignee, Synopsys, Inc., pursuant to the Assignments recorded in the U.S. Patent and Trademark Office on 02/09/2001 on Reel 01556, Frame 0815, and on 10/25/2004 on Reel 015279, Frame 0811.

II. RELATED APPEALS AND INTERFERENCES

Based on information and belief, there are no other appeals or interferences that could directly affect or be directly affected by or have a bearing on the decision by the Board of Patent Appeals in the pending appeal.

III. STATUS OF CLAIMS

Claims 26-40 are pending. Claims 26-40 stand rejected. In the present paper, rejected Claims 26-40 are appealed. Pending Claims 26-40 are listed in VIII. Claims Appendix.

IV. STATUS OF AMENDMENTS

All claim amendments have been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The recited techniques connect payment to the success of a customer. Page 3, lines 11-12. For this reason, a software vendor finds it advantageous to create tools that are easy to learn, easy to use, and with all the necessary functionality. Page 3, lines 12-14. By connecting payment to the success of the customer, the software vendor is more likely to quickly resolve any problem encountered by the customer to hasten the completion of the customer's program and hence receive payment. Page 3, lines 14-16. By sharing the financial risk, the software vendor becomes a trusted partner in the customer's program and increase customer productivity. Page 3, lines 16-18. The software vendor becomes a key part of the supply chain and shares in the rewards of opening the customer's productivity bottleneck. Page 3, lines 18-19.

A concise explanation of the subject matter defined in each of the independent claims involved in the appeal (i.e. Claims 26, 33, and 40) is provided below. This concise explanation refers to the specification by page and line numbers.

Claim 26: A method for using a computer system running a computer-aided-design (CAD) tool in generating one or more outputs, thereby activating at least one payment request in accordance with a contract associated with the use of the CAD tool in generating the one or more outputs, the method comprising:

providing a first payment for the CAD tool in accordance with the contract, wherein the first payment is associated with user access to the CAD tool [**Page 3, lines 8-11; page 4, lines 12-13, 14-15; page 6, lines 4-9**];

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using the CAD tool, wherein the computer system running the CAD tool includes criteria for requesting at least one additional payment for the CAD tool, each additional payment being associated with generating an output, the computer system being responsive to one or more trigger conditions corresponding to the criteria [**Page 7, lines 10-19**]; and

receiving a payment request when an output generated by the CAD tool satisfies a trigger condition, wherein the trigger condition adds a watermark to the output for identifying the output as having been produced by the CAD tool [**Page 8, line 17 to page 9, line 7**].

Claim 33: A method for monitoring a use of a computer-aided-design (CAD) tool in generating one or more outputs, thereby facilitating enforcement of a contract associated with the use of the CAD tool in generating the one or more outputs, the method comprising:

receiving a first payment for the CAD tool in accordance with the contract as a vendor of the CAD tool, wherein the first payment is associated with user access to the CAD tool [**Page 4, lines 12-13, 14-15; page 6, lines 4-9**];

entering criteria for requesting at least one additional payment for the CAD tool into a computer system running the CAD tool, each additional payment being associated with the CAD tool generating an output, the computer system being responsive to one or more trigger conditions corresponding to the criteria [**Page 7, lines 10-21**]; and

generating a payment request when an output generated by the CAD tool satisfies a trigger condition [**Page 7, lines 17-19**].

Claim 40: A method for monitoring the use of a computer-aided-design (CAD) tool usable to produce an output data file and enforcing a contract with a CAD tool user for the CAD tool, the method comprising:

receiving the CAD tool by the CAD tool user [**Page 6, line 5**];

making a first payment by the CAD tool user upon receipt of the CAD tool [**Page 6, lines 4-9**];

running the CAD tool on a computer system, the CAD tool specifying a trigger condition for requesting a second payment, the first and second payments representing a purchase price related to the CAD tool and specified by the contract, the trigger condition including producing the output data file using the CAD tool [**Page 7, lines 10-21, page 8, lines 8-9**];

producing the output data file by the CAD tool user using the CAD tool, wherein the CAD tool automatically adds a watermark to the output data file to identify the output data file as having been produced with the CAD tool, wherein the watermark includes at least one of a naming convention, non-functional data, a spacing convention, and an ordering convention that indicates the trigger condition, wherein the computer system automatically detects the watermark [**Page 7, lines 10-21; page 8, line 17 to page 9, line 8**]; and

upon detection of the watermark, receiving a request for the second payment by the CAD tool user in accordance with the contract [**Page 3, lines 8-11; page 8, lines 17 to page 9, line 1**].

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The following issue is presented to the Board of Appeals for decision:

(A) Whether Claims 26-40 are patentable under 35 U.S.C. 103(a) over U.S. Patent 6,594,799 (Robertson).

VII. ARGUMENTS

A.   Claims 26-40 are patentable under 35 U.S.C. 103(a) over U.S. Patent 6,594,799 (Robertson)

1. Robertson: Overview

Robertson teaches that a portal site may facilitate the purchase or lease of tools and services offered through it. Abstract. For example, a supplier of design automation services may offer its tools on a license through a transaction carried out via the portal site. Col. 6, lines 55-58.

For purchasing actual components with respect to a design, a bill of materials can be automatically generated from the components in the design. Col. 12, lines 26-29. The user may initiate automatic generation of the bill of materials by making an appropriate menu selection using design console client software at the user's system. Col. 12, lines 29-34.

At the portal site, an application server receives a user's requests for the purchase of a component and generates a transaction record. Col. 12, lines 20-23. The transaction record generated in the early stage of a purchase transaction may be updated as each step towards a final transaction is completed. Col. 13, lines 29-31.

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If the portal site is handling billing for this transaction, then the application server can generate an invoice and transmit it from the portal site to the user over the Internet. Col. 14, lines 49-52. The user can then transmit remittance for the invoice to the portal site either electronically or through paper. Col. 14, lines 52-55.

Robertson teaches collecting user usage patterns (e.g. the number of time the user has visited or used features of the portal, the number of times certain information items or types have been accessed and in what order, etc.) for a user profile database. Co. 15, lines 28-37. However, notably, this usage pattern does not trigger payments.

If an IP core is being purchased/licensed, Robertson teaches protecting that core from piracy or unauthorized use by embedding each IP core transmitted via the portal site with a digital watermark. Col. 18, lines 41-50. After all IP cores have been selected and the user indicates his wish to use the IP core(s) in his design, then a purchasing routine is invoked. FIG. 6, 603, 622, 624; col. 18, lines 59-65.

2. **Limitations recited in Claims 26-40 are not taught by Robertson.**

Claim 26 recites in part:

using the CAD tool, wherein the computer system
running the CAD tool includes criteria for requesting
at least one additional payment for the CAD tool, each
additional payment being associated with generating an
output, the computer system being responsive to one or
more trigger conditions corresponding to the criteria;
and
receiving a payment request when an output
generated by the CAD tool satisfies a trigger
condition, wherein the trigger condition adds a
watermark to the output for identifying the output as
having been produced by the CAD tool.

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The Examiner states that the portal site of Robertson may facilitate purchase, lease, or other acquisition (which may include pay-per-use or pay by installment based on a contract or agreement) of the tools and services offered through it. Appellant traverses this characterization. Specifically, the embodiments taught by Robertson do not teach a pay-per-use plan or a pay-by-installment plan. None of the passages cited by the Examiner (i.e. the Abstract, FIGS. 3-5, 7-10; col. 1, lines 35-54; col. 2, lines 12-24, 40-54; col. 4, lines 49-61; and col. 4, line 64 to col. 5, line 28) teach a pay-per-use or pay-by-installment plan. Indeed, because Robertson does not teach a pay-per-use or a pay-by-installment plan, Robertson does not recognize the advantages of using a **watermark added to the output as a trigger for requesting additional payment for a CAD tool**.

Instead, Robertson uses a watermark merely to protect an IP core when it is electronically delivered to the user via the portal site. Col. 18, lines 41-58. Robertson fails to make any suggestion that a watermark can be used to **trigger an additional payment based on an output of a CAD tool including the watermark**.

Robertson does teach that the portal site can deduct a transaction fee from a user payment before sending the remainder of the user payment to the provider of the IC fabrication service. See, e.g. Claims 10 and 11. However, this transaction fee also fails to teach a pay-per-use or pay-by-installment plan.

The Examiner admits that Robertson fails to teach the above-quoted limitations relating to using the CAD tool and receiving the payment request. However, the Examiner then cites Official Notice/common practice in obviating criteria for

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requesting an additional payment based on generating an output using the CAD tool and receiving a payment request based on the trigger condition, which is identified by a watermark in the output. Appellant appreciates the Examiner's examples of "outputs" including watermarks, thereby providing support for his Official Notice/common practice rejection. However, Appellant respectfully submits that such examples are clearly distinguished from the present invention.

Specifically, the Examiner states that it is common practice to watermark a dollar bill, software, or a video to guarantee product integrity or prevent fraud. Appellant appreciates these uses of watermarks. **However, the use of the watermark in the present invention is quite different. That is, the watermark is added to the output to "identify the output as having been produced by the CAD tool". Moreover, this watermark then triggers a payment request, which is not the case for any of the "common practice" watermarks.**

As noted above, Robertson uses a watermark to **protect** an IP core when it is electronically delivered to the user via the portal site. Col. 18, lines 41-58. Thus, Robertson uses a watermark in a manner that conforms to the Examiner's "common practice" watermarks. However, **as evidenced by the lack of disclosure in Robertson, it is not common practice in the CAD industry to negotiate a payment installment plan or payment schedule for a CAD tool, much less generate a request for an additional payment, which is triggered by a watermarked output of the CAD tool.** Therefore, even when common practice/Official Notice and Robertson are combined, the recited steps of using and receiving are not disclosed or suggested. Based on the above reasons, Appellant requests reconsideration and withdrawal of the rejection of Claim 26.

Claims 27-32 depend from Claim 26 and therefore are patentable for at least the reasons presented for Claim 26. Based on those reasons, Appellant requests reconsideration and withdrawal of the rejection of Claims 27-32.

Claim 33 recites:

> entering criteria for requesting at least one additional payment for the CAD tool into a computer system running the CAD tool, each additional payment being associated with the CAD tool generating an output, the computer system being responsive to one or more trigger conditions corresponding to the criteria; and
>
> generating a payment request when an output generated by the CAD tool satisfies a trigger condition.

Therefore, Claim 33 is patentable for substantially the same reasons presented for Claim 26. Based on those reasons, Appellant requests reconsideration and withdrawal of the rejection of Claim 33.

Claims 34-39 depend from Claim 33 and therefore are patentable for at least the reasons presented for Claim 33. Based on those reasons, Appellant requests reconsideration and withdrawal of the rejection of Claims 34-39.

Claim 40 recites:

> running the CAD tool on a computer system, the CAD tool specifying a trigger condition for requesting a second payment, the first and second payments representing a purchase price related to the CAD tool and specified by the contract, the trigger condition including producing the output data file using the CAD tool;
>
> producing the output data file by the CAD tool user using the CAD tool, wherein the CAD tool automatically adds a watermark to the output data file to identify the output data file as having been produced with the CAD tool, wherein the watermark includes at least one of a naming convention, non-functional data, a spacing convention, and an ordering convention that indicates the trigger condition,

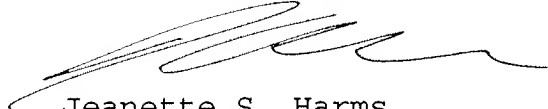wherein the computer system automatically detects the watermark; and

     upon detection of the watermark, receiving a request for the second payment by the CAD tool user in accordance with the contract.

Therefore, Claim 40 is patentable for substantially the same reasons presented for Claim 26. Based on those reasons, Appellant requests reconsideration and withdrawal of the rejection of Claim 40.

B. CONCLUSION

For the foregoing reasons, it is submitted that the Examiner's rejections of Claims 26-40 are erroneous, and reversal of these rejections is respectfully requested.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

26. (Previously Presented) A method for using a computer system running a computer-aided-design (CAD) tool in generating one or more outputs, thereby activating at least one payment request in accordance with a contract associated with the use of the CAD tool in generating the one or more outputs, the method comprising:

provideng a first payment for the CAD tool in accordance with the contract, wherein the first payment is associated with user access to the CAD tool;

using the CAD tool, wherein the computer system running the CAD tool includes criteria for requesting at least one additional payment for the CAD tool, each additional payment being associated with generating an output, the computer system being responsive to one or more trigger conditions corresponding to the criteria; and

receiving a payment request when an output generated by the CAD tool satisfies a trigger condition, wherein the trigger condition adds a watermark to the output for identifying the output as having been produced by the CAD tool.

27. (Previously Presented) The method of Claim 26, further comprising sending a payment to a vendor of the CAD tool in response to the payment request and in accordance with the contract.

28. (Previously Presented) The method of Claim 26, wherein the trigger condition disables a set of features of the CAD tool until the additional payment is made.

29. (Previously Presented) The method of Claim 28, wherein the set of features include at least one of generating a predetermined output file and running the CAD tool.

30. (Previously Presented) The method of Claim 26, wherein the watermark comprises at least one of non-functional data, a naming convention, a spacing convention, an ordering convention, and non-functional elements.

31. (Previously Presented) The method of Claim 26, wherein the CAD tool comprises an integrated circuit (IC) design tool.

32. (Previously Presented) The method of Claim 31, wherein the output has a form of at least one of hardware description language (HDL), register transfer level description (RTL), a macro, a hard macro, a soft macro, a core, a hard core, a soft core, a net-list, a synthesizable net-list, a layout, a process-independent layout, and a process-dependent layout.

33. (Previously Presented) A method for monitoring a use of a computer-aided-design (CAD) tool in generating one or more outputs, thereby facilitating enforcement of a contract associated with the use of the CAD tool in generating the one or more outputs, the method comprising:

receiving a first payment for the CAD tool in accordance with the contract as a vendor of the CAD tool, wherein the first payment is associated with user access to the CAD tool;

entering criteria for requesting at least one additional payment for the CAD tool into a computer system running the CAD tool, each additional payment being associated with the CAD tool generating an output, the computer system being responsive to

one or more trigger conditions corresponding to the criteria; and

generating a payment request when an output generated by the CAD tool satisfies a trigger condition.

34. (Previously Presented) The method of Claim 33, further comprising receiving another payment as the vendor of the CAD tool in response to the payment request and in accordance with the contract.

35. (Previously Presented) The method of Claim 33, wherein the trigger condition disables a set of features of the CAD tool until the additional payment is made.

36. (Previously Presented) The method of Claim 33, wherein the trigger condition adds a watermark to the output for identifying the output as having been generated by the CAD tool.

37. (Previously Presented) The method of Claim 36, wherein the watermark comprises at least one of non-functional data, a naming convention, a spacing convention, an ordering convention, and non-functional elements.

38. (Previously Presented) The method of Claim 33, wherein the CAD tool comprises an integrated circuit (IC) design tool.

39. (Previously Presented) The method of Claim 38, wherein the output has a form of at least one of hardware description language (HDL), register transfer level description (RTL), a macro, a hard macro, a soft macro, a core, a hard core, a soft core, a net-list, a synthesizable net-list, a layout, a process-independent layout, and a process-dependent layout.

40. (Previously Presented) A method for monitoring the use of a computer-aided-design (CAD) tool usable to produce an output data file and enforcing a contract with a CAD tool user for the CAD tool, the method comprising:

receiving the CAD tool by the CAD tool user;

making a first payment by the CAD tool user upon receipt of the CAD tool;

running the CAD tool on a computer system, the CAD tool specifying a trigger condition for requesting a second payment, the first and second payments representing a purchase price related to the CAD tool and specified by the contract, the trigger condition including producing the output data file using the CAD tool;

producing the output data file by the CAD tool user using the CAD tool, wherein the CAD tool automatically adds a watermark to the output data file to identify the output data file as having been produced with the CAD tool, wherein the watermark includes at least one of a naming convention, non-functional data, a spacing convention, and an ordering convention that indicates the trigger condition, wherein the computer system automatically detects the watermark; and

upon detection of the watermark, receiving a request for the second payment by the CAD tool user in accordance with the contract.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None